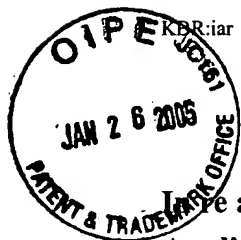


1Fw



01/21/05 3382-66124-01 MS 300281.01

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Large application of: Thumpudi et al.

Application No. 10/622,822

Filed: July 18, 2003

Confirmation No. 3034

For: CONSTANT BITRATE MEDIA  
ENCODING TECHNIQUES

Examiner:

Art Unit: 2641

Attorney Reference No. 3382-66124-01

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on the date shown below.

Attorney  
for Applicants

Date Mailed

*[Signature]*  
*January 21, 2005*

**INFORMATION DISCLOSURE STATEMENT  
PURSUANT TO 37 C.F.R. § 1.97(b)(3)**

COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

Copies of United States patents and United States published patent applications do not have to be provided to the Patent Office (37 C.F.R. 1.98(a)(2)(ii)). Copies of unpublished U.S. applications do not have to be provided, as long as the application is available on PAIR, as this requirement of 37 C.F.R. § 1.98(a)(2)(iii) has been waived by the United States Patent and Trademark Office pursuant to the Official Gazette Notice on October 19, 2004 (1287 OG 163). Applicants will provide copies of such patents or applications upon request.


Applicants filed this Information Disclosure Statement ("IDS") before the mailing date of a first Office action on the merits. As a result, no fee should be required to file this IDS.

However, if the Patent Office determines that a fee is required for Applicants to file this IDS, please charge any such fees, or credit overpayment, to Deposit Account No. 02-4550. A **duplicate** copy of this Information Disclosure Statement is enclosed.

The filing of this IDS shall not be construed to be an admission that the information cited in the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37 C.F.R. §1.56.

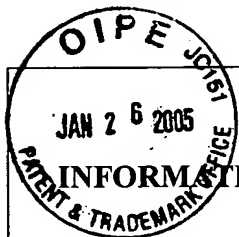
Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By   
Kyle B. Rinehart  
Registration No. 47,027

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446

cc: Client (300281.01)  
Docketing



# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-66124-01
Application Number	10/622,822
Filing Date	July 18, 2003
First Named Inventor	Thumpudi
Art Unit	2641
Examiner Name	

## U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
		4,051,470	9.27.1977	Esteban et al.
		5,457,495	10.10.1995	Hartung
		5,467,134	11.14.1995	Laney et al.
		5,579,430	11.26.1996	Grill et al.
		5,686,964	11.11.1997	Tabatabai et al.
		5,742,735	4.21.1998	Eberlein et al.
		5,819,215	10.6.1998	Dobson et al.
		5,835,149	11.10.1998	Astle
		5,845,243	12.1.1998	Smart et al.
		5,995,151	11.30.1999	Naveen et al.
		6,029,126	2.22.2000	Malvar
		6,111,914	8.29.2000	Bist
		6,115,689	9.5.2000	Malvar
		6,182,034	1.30.2001	Malvar
		6,370,502	4.9.2002	Wu et al.
		6,574,593	6.3.2003	Gao et al.
		US-2002-0143556-A1	10.03.2002	Kadatch

EXAMINER SIGNATURE:	DATE CONSIDERED:
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Attorney Docket Number	3382-66124-01	
		Application Number	10/622,822	
		Filing Date	July 18, 2003	
		First Named Inventor	Thumpudi	
		Art Unit	2641	
		Examiner Name		
<b>U.S. PATENT DOCUMENTS</b>				
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>Number</b>	<b>Publication Date</b>	<b>Name of Applicant or Patentee</b>
		US-2003-0115050-A1	6.19.2003	Chen et al.
		US-2003-0115042-A1	6.19.2003	Chen et al.
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>OTHER DOCUMENTS</b>		
		Advanced Television Systems Committee, "ATSC Standard: Digital Audio Compression (AC-3), Revision A," pp. 1-140 (August 2001).		
		Caetano et al., "Rate Control Strategy for Embedded Wavelet Video Coders," <i>Electronics Letters</i> , pp. 1815-1817 (October 14, 1999).		
		Cheung et al., "A Comparison of Scalar Quantization Strategies for Noisy Data Channel Data Transmission," <i>IEEE Transactions on Communications</i> , Vol. 43, No. 2/3/4, pp. 738-742 (April 1995).		
		Crisafulli et al., "Adaptive Quantization: Solution via Nonadaptive Linear Control," <i>IEEE Transactions on Communications</i> , Vol. 41, pp. 741-748 (May 1993).		
		Dalgic et al., "Characterization of Quality and Traffic for Various Video Encoding Schemes and Various Encoder Control Schemes," Technical Report No. CSL-TR-96-701 (August 1996).		
		Dolby Laboratories, "AAC Technology," 4 pp. [Downloaded from the web site aac-audio.com on World Wide Web on November 21, 2001.]		
		Fraunhofer-Gesellschaft, "MPEG Audio Layer-3," 4 pp. [Downloaded from the World Wide Web on October 24, 2001.]		
		Fraunhofer-Gesellschaft, "MPEG-2 AAC," 3 pp. [Downloaded from the World Wide Web on October 24, 2001.]		
		Gibson et al., "Quantization," Digital Compression for Multimedia, Chapter 4, pp. 113-138 (1998).		
<b>EXAMINER SIGNATURE:</b>		<b>DATE CONSIDERED:</b>		
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.				

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Attorney Docket Number	3382-66124-01
		Application Number	10/622,822
		Filing Date	July 18, 2003
		First Named Inventor	Thumpudi
		Art Unit	2641
		Examiner Name	
Examiner's Initials*	Cite No. (optional)	<b>OTHER DOCUMENTS</b>	
		Gibson et al., "Chapter 7: Frequency Domain Coding," Digital Compression for Multimedia, Title Page, Contents, Morgan Kaufman Publishers, Inc., pp. iii, v-xi, and 227-262 (1998).	
		Gibson et al., "Frequency Domain Speech and Audio Coding Standards," Digital Compression for Multimedia, Chapter 8, pp. 263-290 (1998).	
		Gibson et al., "MPEG Audio," Digital Compression for Multimedia, Chapter 11.4, pp. 398-402 (1998).	
		ISO, "MPEG-4 Video Verification Model version 18.0," ISO/IEC JTC1/SC29/WG11 N3908, January 2001, Pisa, pp. 1-10, 299-311 (January 2001).	
		ISO/IEC 11172-3, Information Technology -- Coding of Moving Pictures and Associated Audio for Digital Storage Media at Up to About 1.5 Mbit/s -- Part 3: Audio, 154 pp. (1993).	
		ISO/IEC 13818-7, "Information Technology -- Generic Coding of Moving Pictures and Associated Audio Information, Part 7: Advanced Audio Coding (AAC)," pp. i-iv, 1-145, ISO/IEC (1997).	
		ISO/IEC 13818-7, Technical Corrigendum 1, "Information Technology -- Generic Coding of Moving Pictures and Associated Audio Information, Part 7: Advanced Audio Coding (AAC), Technical Corrigendum," pp. 1-22, ISO/IEC (1997).	
		ITU, Recommendation ITU-R BS 1115, Low Bit-Rate Audio Coding, 9 pp. (1994).	
		Jafarkhani et al., "Entropy-Constrained Successively Refinable Scalar Quantization," <i>Proc. DCC '97</i> , pp. 337-346 (1997).	
		Jayant et al., <u>Digital Coding of Waveforms, Principles and Applications to Speech and Video</u> , pp. 428-445, Prentice Hall (1984).	
		Naveen et al., "Subband Finite State Scalar Quantization," IEEE Transactions on Image Processing, vol. 5, no. 1, pp. 150-155 (January 1996).	
EXAMINER SIGNATURE:		DATE CONSIDERED:	
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.			

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Attorney Docket Number	3382-66124-01
		Application Number	10/622,822
		Filing Date	July 18, 2003
		First Named Inventor	Thumpudi
		Art Unit	2641
		Examiner Name	
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>OTHER DOCUMENTS</b>	
		Ortega et al., "Adaptive Scalar Quantization Without Side Information," IEEE Transactions on Image Processing, vol. 6, no. 5, pp. 665-676 (May 1997).	
		Ortega et al., "Optimal Buffer-constrained Source Quantization and Fast Approximation," IEEE, pp. 192-195 (1992).	
		Ramchandran et al., "Bit Allocation for Dependent Quantization with Applications to MPEG Video Coders," IEEE, pp. v-381 – v-384 (1993).	
		Ratnakar et al., "RD-OPT: An Efficient Algorithm for Optimizing DCT Quantization Tables," 11 pp.	
		Ribas Corbera et al., "Rate Control in DCT Video Coding for Low-Delay Communications," <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , Vol. 9, No. 1, pp. 172-185 (February 1999).	
		Sidiropoulos, "Optimal Adaptive Scalar Quantization and Image Compression," <i>ICIP '98</i> , pp. 574-578 (1998).	
		Solari, "Chapter 8: Sound and Audio," Digital Video and Audio Compression, Title Page, Contents, McGraw-Hill, Inc., pp. iii, v-vi, and 187-211 (1997).	
		Srinivasan et al., "High-Quality Audio Compression Using an Adaptive Wavelet Packet Decomposition and Psychoacoustic Modeling," IEEE Transactions on Signal Processing, vol. 46, no. 4, pp. 1085-1093 (April 1998).	
		Sullivan, "Optimal Entropy Constrained Scalar Quantization for Exponential and Laplacian Random Variables," <i>ICASSP '94</i> , pp. v-265 - v-268 (1994).	
		Trushkin, "On the Design on an Optimal Quantizer," <i>IEEE Transactions on Information Theory</i> , Vol. 39, No. 4, pp. 1180-1194 (July 1993).	
		Westerink et al., "Two-pass MPEG-2 Variable-bit-rate Encoding," <i>IBM J. Res. Develop.</i> , Vol. 43, No. 4, pp. 471-488 (1999).	

EXAMINER SIGNATURE:	DATE CONSIDERED:
<p>* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Attorney Docket Number	3382-66124-01
		Application Number	10/622,822
		Filing Date	July 18, 2003
		First Named Inventor	Thumpudi
		Art Unit	2641
		Examiner Name	
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>OTHER DOCUMENTS</b>	
		Wong, "Progressively Adaptive Scalar Quantization," <i>ICIP '96</i> , pp. 357-360 (1996).	
		Wu et al., "Entropy-Constrained Scalar Quantization and Minimum Entropy with Error Bound by Discrete Wavelet Transforms in Image Compression," <i>IEEE Transactions on Signal Processing</i> , Vol. 48, No. 4, pp. 1133-1143 (April 2000).	
		Wu et al., "Quantizer Monotonicities and Globally Optimally Scalar Quantizer Design," <i>IEEE Transactions on Information Theory</i> , Vol. 39, No. 3, pp. 1049-1053 (May 1993).	

EXAMINER SIGNATURE:	DATE CONSIDERED:
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	